



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,021	03/30/2004	Kazunari Tanaka	1095.1308	2782
21171 7590 01/07/2010 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
EXAMINER MAHMOOD, REZWANUL				
ART UNIT		PAPER NUMBER		
2164				
MAIL DATE		DELIVERY MODE		
01/07/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/812,021

**Applicant(s)**

TANAKA ET AL.

**Examiner**

REZWANUL MAHMOOD

**Art Unit**

2164

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3 and 5-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to the communication filed on September 14, 2009. Claims 2, 3, and 5-14 are pending in this office action.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 2, 3, 5-12 and 14 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed on September 14, 2009 with respect to claim 13 have been fully considered but they are not persuasive for the following reasons:

Applicant argues that Feldman and Uramoto do not teach or even suggest the features "displaying a relational chart illustrating documents having relevancy and lines connected between the each document pair according to the calculated degree of relevancy and maintaining a time relation of the document pairs in chronological order".

Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-1]

#### **Interpretation of Claims-Broadest Reasonable Interpretation**

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the

examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Feldman teaches in Column 3 lines 55-67, Column 4 lines 1-13, Column 8 lines 46- 67, Column 9 lines 1-3, Column 10 lines 45-67, Column 11 lines 1-4, Figure 1 and Figure 6 laying out objects indicative of the documents on the relation chart which has a time axis, based on the time information and generating association lines for connecting between the objects of each document pair, depending on the calculated degree of relevancy. However, Feldman does not explicitly disclose maintaining a chronological order of different documents forming each document pair and displaying with chronological order maintained. The Uramoto reference discloses in Abstract lines 1-9, Column 1 lines 6-12 and 49-55, Column 5 lines 17-24 and in Figure 8 maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman with the teachings of Uramoto to maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs in a relation chart for efficiently threading documents that appear in chronological order (Uramoto: Column 1, lines 6-9).

For the above reasons, Examiner believed that rejection of the last Office action was proper.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 5-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldman (US Patent 6,532,469) in view of Uramoto (US Patent 6,311,198) and in further view of Hill (US Patent 5,808,615).

With respect to claim 9, Feldman discloses a computer implemented method of creating a relation chart representative of relations between a plurality of documents (Feldman: Column 1, lines 44-54; Column 3, lines 55-67; Column 4, lines 1-13; Figure 1; Figure 6), comprising:

analyzing contents of each of the documents and extracting feature elements including time information therefrom (Feldman: Column 1, lines 44-54; Column 2, lines 43-48; Column 3 lines 1-6 and 55-67; Column 4, lines 1-13; Column 7, lines 29-34 and 50-67);

calculating a degree of relevancy between each document pair extracted from the documents, based on the extracted feature elements (Feldman: Column 3, lines 55-67; Column 4, lines 1-13 and 30-55);

laying out objects indicative of the documents on the relation chart, which has a

time axis, based on the time information (Feldman: Column 3, lines 55-67; Column 4, lines 1-13; Column 8, lines 46-67; Column 9, lines 1-3; Column 10, lines 45-67; Column 11, lines 1-4; Figure 1; Figure 6);

generating association lines for connecting between the objects of each document pair in the relation chart having the time axis, depending on the calculated degree of relevancy (Feldman: Column 3, lines 55-67; Column 4, lines 1-13; Column 8, lines 46-67; Column 9, lines 1-3; Column 10, lines 45-67; Column 11, lines 1-4; Figure 1; Figure 6); and

displaying the relation chart composed of the objects and the association lines (Feldman: Column 4, lines 30-55; Figure 1; Figure 6);

However, Feldman does not explicitly disclose:

maintaining a chronological order of different documents forming each document pair and displaying with chronological order maintained.

The Uramoto reference, however, discloses maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs (Uramoto: Abstract, lines 1-9; Column 1, lines 6-12 and 49-55; Column 5, lines 17-24; Figure 8).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman with the teachings of Uramoto to maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs in a relation chart for efficiently threading documents that appear in

chronological order (Uramoto: Column 1, lines 6-9).

Feldman and Uramoto do not explicitly disclose:

at least some of the objects being displayed with chronological order irrespective of whether the some of the objects are connected with the association lines.

The Hill reference discloses laying out documents based on time or date wherein at least some documents are displayed irrespective of whether the documents are connected with association lines (Hill: Column 3, lines 39-55 and 64-67; Column 4, lines 1-11 and 66-67; Column 5, lines 1-6 and 27-40; Figures 1, 2, and 5B).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman and Uramoto with the teachings of Hill to display in chronological order at least some objects irrespective of whether the objects are connected with association lines for mapping the relationship of the content of a collection of documents (Hill: Column 1, lines 8-9).

With respect to claim 2, Feldman in view of Uramoto and in further view of Hill discloses the method according to claim 9, wherein when the association lines are generated, the association lines between predetermined ones of the document pairs are discarded for thinning-out based on the degree of relevancy of the document pair without citation relationship (Feldman: Column 1, lines 57-61; Column 9, lines 4-34; Figure 6).

With respect to claim 3, Feldman in view of Uramoto and in further view of Hill

discloses the method according to claim 9, wherein when the association lines are generated, ones of the association lines between ones of the document pairs having the citation relationship are displayed in a form of display different from a form of display in which the others of the association lines are displayed (Feldman: Column 2, lines 61-67; Column 3, lines 29-32; Column 4, lines 30-55; Figure 6).

With respect to claim 5, Feldman in view of Uramoto and in further view of Hill discloses the method according to claim 9, wherein when the objects indicative of the documents are laid out, the objects indicative of the documents are arranged along the time axis based on the time information with the chronological order maintained among all of the objects (Feldman: Column 2, lines 43-48; Column 3, lines 55-67; Column 4, lines 1-13 and 30-55; Column 7, lines 29-34; Column 8, lines 46-67; Column 10, lines 45-67; Column 11, lines 1-14; Figure 6).

With respect to claim 6, Feldman in view of Uramoto and in further view of Hill discloses the method according to claim 9, wherein when the objects indicative of the documents are laid out, the time axis is represented in basic units each corresponding to a predetermined time period, and the order along the time axis is preserved between objects indicative of the documents belonging to different ones of the time periods (Feldman: Column 2, lines 43-48; Column 3, lines 55-67; Column 4, lines 1-13 and 30-55; Column 7, lines 29-34; Column 8, lines 46-67; Column 10, lines 45-67; Column 11, lines 1-14; Figure 6).



With respect to claim 7, Feldman in view of Uramoto and in further view of Hill discloses the method according to claim 9, wherein assuming that patent documents are inputted as the plurality of documents, in extracting the feature elements, dates of application are extracted as the time information (Feldman: Column 2, lines 43-48; Column 3, lines 55-67; Column 4, lines 1-13 and 30-55; Column 7, lines 29-34; Column 8, lines 46-67; Column 10, lines 45-67; Column 11, lines 1-14; Figure 6).

With respect to claim 8, Feldman in view of Uramoto and in further view of Hill discloses the method according to claim 9, wherein assuming that patent documents are inputted as the plurality of documents, in extracting the feature elements, dates of application and priority dates are extracted as the time information (Feldman: Column 2, lines 43-48; Column 3, lines 55-67; Column 4, lines 1-13 and 30-55; Column 7, lines 29-34; Column 8, lines 46-67; Column 10, lines 45-67; Column 11, lines 1-14; Fig 6), and wherein when the objects indicative of the documents are laid out, if a date of application and a priority date have been extracted from a document, the priority date is regarded as the time information of the document (Feldman: Column 2, lines 43-48; Column 3, lines 55-67; Column 4, lines 1-13 and 30-55; Column 7, lines 29-34; Column 8, lines 46-67; Column 10, lines 45-67; Column 11, lines 1-14; Figure 6).

With respect to claim 10, Feldman discloses a relation chart-creating apparatus for creating a relation chart representative of relations between a plurality of documents (Feldman: Column 1, lines 44-54; Column 3, lines 55-67; Column 4, lines 1-13; Figure 1;

Figure 6), comprising:

feature element-extracting means for analyzing contents of each of the documents and extracting feature elements including time information (Feldman: Column 1, lines 44-54; Column 2, lines 43-48; Column 3 lines 1-6 and 55-67; Column 4, lines 1-13; Column 7, lines 29-34 and 50-67);

relevancy-calculating means for calculating a degree of relevancy between each document pair extracted from the documents, based on the extracted feature elements (Feldman: Column 3, lines 55-67; Column 4, lines 1-13 and 30-55);

layout means for laying out objects indicative of the documents on the relation chart, which has a time axis, based on the time information (Feldman: Column 3, lines 55-67; Column 4, lines 1-13 and 30-55);

association line-generating means for generating association lines for connecting between the objects of each document pair, depending on the calculated degree of relevancy (Feldman: Column 3, lines 55-67; Column 4, lines 1-13; Column 8, lines 46-67; Column 9, lines 1-3; Column 10, lines 45-67; Column 11, lines 1-4; Fig 1; Fig 6); and

display means for displaying the relation chart composed of the objects and the association lines (Feldman: Column 4, lines 30-55; Figure 1; Figure 6),

However, Feldman does not explicitly disclose:

displaying while maintaining chronological order of the document pairs.

The Uramoto reference, however, discloses maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs (Uramoto: Abstract, lines 1-9;

Column 1, lines 6-12 and 49-55; Column 5, lines 17-24; Figure 8).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman with the teachings of Uramoto to maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs in a relation chart for efficiently threading documents that appear in chronological order (Uramoto: Column 1, lines 6-9).

Feldman and Uramoto do not explicitly disclose:

at least some of the objects being displayed with chronological order maintained irrespective of whether the some of the objects are connected with association lines.

The Hill reference discloses laying out documents based on time or date wherein at least some documents are displayed irrespective of whether the documents are connected with association lines (Hill: Column 3, lines 39-55 and 64-67; Column 4, lines 1-11 and 66-67; Column 5, lines 1-6 and 27-40; Figures 1, 2, and 5B).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman and Uramoto with the teachings of Hill to display in chronological order at least some objects irrespective of whether the objects are connected with association lines for mapping the relationship of the content of a collection of documents (Hill: Column 1, lines 8-9).

With respect to claim 11, Feldman discloses a computer-readable recording medium that records a relation chart-creating program for creating a relation chart

representative of relations between a plurality of documents (Feldman: Column 1, lines 44-54; Column 3, lines 55-67; Column 4, lines 1-13; Figure 1; Figure 6), the program causing a computer to:

analyze contents of each of the documents and extract feature elements including time information therefrom (Feldman: Column 1, lines 44-54; Column 2, lines 43-48; Column 3 lines 1-6 and 55-67; Column 4, lines 1-13; Column 7, lines 29-34 and 50-67);

calculate a degree of relevancy between each document pair extracted from the documents, based on the extracted feature elements (Feldman: Column 3, lines 55-67; Column 4, lines 1-13 and 30-55);

lay out objects indicative of the documents on the relation chart, which has a time axis, based on the time information, and generate association lines for connecting between the objects of each document pair, depending on the calculated degree of relevancy (Feldman: Column 3, lines 55-67; Column 4, lines 1-13 and 30-55; Column 8, lines 46-67; Column 9, lines 1-3; Column 10, lines 45-67; Column 11, lines 1-4; Figure 1; Figure 6); and

display the relation chart composed of the objects and the association lines (Feldman: Column 4, lines 30-55; Figure 1; Figure 6),

However, Feldman does not explicitly disclose:

displaying while maintaining chronological order of the document pairs.

The Uramoto reference, however, discloses maintaining a chronological order of different documents forming each document pair and displaying relationship while

maintaining chronological order of the document pairs (Uramoto: Abstract, lines 1-9; Column 1, lines 6-12 and 49-55; Column 5, lines 17-24; Figure 8).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman with the teachings of Uramoto to maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs in a relation chart for efficiently threading documents that appear in chronological order (Uramoto: Column 1, lines 6-9).

Feldman and Uramoto do not explicitly disclose:

at least some of the objects being displayed with chronological order maintained irrespective of whether the some of the objects are connected with the association lines.

The Hill reference discloses laying out documents based on time or date wherein at least some documents are displayed irrespective of whether the documents are connected with association lines (Hill: Column 3, lines 39-55 and 64-67; Column 4, lines 1-11 and 66-67; Column 5, lines 1-6 and 27-40; Figures 1, 2, and 5B).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman and Uramoto with the teachings of Hill to display in chronological order at least some objects irrespective of whether the objects are connected with association lines for mapping the relationship of the content of a collection of documents (Hill: Column 1, lines 8-9).

With respect to claim 12, Feldman discloses a computer implemented method,

comprising:

extracting feature elements including time information from each document to calculate a degree of relevancy between each pair of document (Feldman: Column 1, lines 44-54; Column 2, lines 43-48; Column 3 lines 1-6 and 55-67; Column 4, lines 1-13; Column 7, lines 29-34 and 50-67);

laying out on a relation chart objects that indicate the documents having relevancy (Feldman: Column 3, lines 55-67; Column 4, lines 1-13 and 30-55); and

displaying the relation chart (Feldman: Column 4, lines 30-55; Figure 1; Fig 6).

However, Feldman does not explicitly disclose:

displaying while maintaining chronological order of the document pairs.

The Uramoto reference, however, discloses maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs (Uramoto: Abstract, lines 1-9; Column 1, lines 6-12 and 49-55; Column 5, lines 17-24; Figure 8).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman with the teachings of Uramoto to maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs in a relation chart for efficiently threading documents that appear in chronological order (Uramoto: Column 1, lines 6-9).

Feldman and Uramoto do not explicitly disclose:

maintaining chronological order among at least some of the objects irrespective

of whether the some of the objects have relevancy.

The Hill reference discloses laying out documents based on time or date wherein at least some documents are displayed irrespective of whether the documents are connected with association lines (Hill: Column 3, lines 39-55 and 64-67; Column 4, lines 1-11 and 66-67; Column 5, lines 1-6 and 27-40; Figures 1, 2, and 5B).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman and Uramoto with the teachings of Hill to display in chronological order at least some objects irrespective of whether the objects are connected with association lines for mapping the relationship of the content of a collection of documents (Hill: Column 1, lines 8-9).

With respect to claim 14, Feldman in view of Uramoto and in further view of Hill discloses the method according to claim 9, wherein the plurality of documents are at least three documents, and the relation chart is composed of at least three objects and the association lines connecting between part or all of the at least three objects (Feldman: Column 10, lines 36-43; Uramoto; Figure 8).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feldman (US Patent 6,532,469) in view of Uramoto (US Patent 6,311,198).

With respect to claim 13, Feldman discloses a computer implemented method, comprising:

calculating a degree of relevancy between document pairs responsive to feature elements having time information extracted from each analyzed document (Feldman: Column 3, lines 55-67; Column 4, lines 1-13 and 30-55); and

displaying a relational chart illustrating documents having relevancy and lines connected between the each document pair according to the calculated degree of relevancy (Feldman: Column 4, lines 30-55; Figure 1; Figure 6).

However, Feldman does not explicitly disclose:

maintaining a time relation of the document pairs in chronological order.

The Uramoto reference, however, discloses maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs (Uramoto: Abstract, lines 1-9; Column 1, lines 6-12 and 49-55; Column 5, lines 17-24; Figure 8).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Feldman with the teachings of Uramoto to maintaining a chronological order of different documents forming each document pair and displaying relationship while maintaining chronological order of the document pairs in a relation chart for efficiently threading documents that appear in chronological order (Uramoto: Column 1, lines 6-9).



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REZWANUL MAHMOOD whose telephone number is (571)272-5625. The examiner can normally be reached on M - F 10 A.M. - 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571)272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. M./  
Examiner, Art Unit 2164  
December 31, 2009

/Charles Rones/  
Supervisory Patent Examiner, Art Unit 2164